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## REMARKS

Claims 1-11, 13-15, and 17-23 are pending in this application.

Claims 1-11, 13-15, and 17-23 are rejected.

The office action indicates that claims 4, 6, 11 and 14 are rejected under 35 USC §102 (b) as being anticipated by Wagensonner et al. U.S. Patent No. 4,812,903. The '102 rejection has been rendered moot by the cancellation of claims 4, 6 and 11, and the amendment to claims 14.

The office action also indicates that claims 1-3, 5, 7-10, 13 and 18-20 are rejected under 35 USC §103 as being unpatentable over Wagensonner et al. in view of Hirose U.S. Patent No. 5,557,429; claims 15 and 21 are rejected under 35 USC §103 as being unpatentable over Wagensonner et al. in view of Gindele; and clams 17, 22 and 23 are rejected under 35 USC §103 as being unpatentable over Wagensonner et al. in view of Gindele and Hirose. The '103 rejection of claims 13, 15 and 17 has been rendered moot by the cancellation of these claims. The remaining '103 rejections are respectfully traversed.

Claim 1 recites a method of processing a pixel of a digital image. The method includes applying a tone mapping function to a first color channel of the pixel, the first color channel most closely matching relative luminance response of the human visual system; computing scale factors for other channels of the pixel; and applying the scale factors to the other color channels of the pixel. The scale factors are computed according to noise balancing terms and a change in value of the first color channel.

The office action acknowledges that Wagensonner et al. do not teach or

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suggest the use of noise balancing terms in the scale factors. However, the office action states that Hirose teaches adding a noise quantity to each color channel (Figs. 2 and 12; col. 8, lines 23-40; and col. 9, lines 29-37).

Hirose discloses a noise generating unit 3 and a noise superposing unit 4. Using Formula 3 (col. 8, line 30) the noise superposing unit 4 adds noise to each component (L, a and b) of a signal in Lab color space. The noise is added to overcome insufficient tone steps in copied images.

The color balancing terms of claim 1 are not actually noise. Rather, they are fixed values added to offset the effect of noise in calculating the scale factors.

Thus, even if Wagensonner et al.'s method is modified according to the teachings of Hirose, the modified method still would not read on the method of claim 1, since Hirose doesn't teach or suggest adding an offset to Wagensonner et al.'s scale factors.

Moreover, Hirose provides no reason, motivation or incentive to modify Wagensonner et al.'s scale factors. Hirose's motivation for adding noise is not relevant to the problems associated with scale factors.

The motivation for adding noise terms to the scale factors is provided in paragraph 13 of the present application

> The addition of the noise balancing terms has very little influence on the chromaticities of high-luminance pixels, but helps reduce the noise amplification problem on low-luminance pixels. The noise balancing terms are also helpful in avoiding division by zero when a zero luminance value is mapped to a non-zero value on the tone curve.

Thus the combined teachings of Wagensonner et al and Hirose do not

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teach or suggest the method of claim 1. Therefore, claim 1 and its dependent claims 2-3 should be allowable over the combination of Wagensonner et al. and Hirose.

Claims 5-10 have been amended to depend from claim 1. These claims, should also be allowable over the combination of Wagensonner et al. and Hirose.

Claim 14 (which now depends from claim 18) and claims 18-23 should be allowed for the same reasons that claim 1 should be allowed.

Claims 24-29 have been added to the application. Claims 26-29 depend from base claims 18 and 21. Claims 24-25 recite that the noise balancing terms are the same for all pixels in the image. This feature is not taught or suggested by the documents made of record. For example, Hirose disclose the superposition of spatially varying noise.

An objection to claim 11 has been rendered moot by the cancellation of claim 11. Nevertheless, the examiner is thanked for pointing out a typographical error in claim 11.

The examiner is respectfully requested to allow claims 1-3, 5-10, 14, and 18-29. If any issues remain, the examiner is invited to contact the undersigned to discuss those remaining issues.